

## **Miami County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/8/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 23 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Miami County economy.<sup>1</sup>

These 23 sectors have a total direct output of approximately \$195.2 million and support 1,662 jobs in Miami County. Running the model for all 23 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Miami County Economy									
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output⁵	Output % of Gross Regional Product			
Direct Effect	1662.0	12.39%	\$49,758,749	5.64%	\$195,221,898	22.14%			
Indirect Effect	225.8	1.68%	\$12,132,511	1.38%	\$23,871,656	2.71%			
Induced Effect	75.8	0.56%	\$5,916,583	0.67%	\$10,202,523	1.16%			
Total Effect	1963.5	14.64%	\$67,807,844	7.69%	\$229,296,078	26.01%			

As shown in the above table, agriculture, food, and food processing sectors support 1,964 jobs, or 14.64% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$229.3 million, roughly 26.01% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 23 agriculture, food, and food processing sectors is approximately \$67.8 million, or 7.69% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 7.69% of the total economy.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

3 Value added = labor income + indirect business taxes + other property type income.

4 GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

5 Output = intermediate inputs + value added.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **737 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Miami County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	737.3	\$28,384,027		
Landscape and horticultural services	196.5	\$8,296,722		
All other crop farming	133.6	\$3,494,818		
Grain farming	93.9	\$11,725,363		
Animal, except poultry, slaughtering	75.7	\$54,689,977		
Support activities for agriculture and forestry	67.1	\$1,603,848		
All other food manufacturing	63.9	\$22,616,927		
Greenhouse, nursery, and floriculture production	63.0	\$7,483,415		
Oilseed farming	60.4	\$21,695,603		
Veterinary services	54.5	\$5,468,761		

The animal, except poultry, slaughtering sector directly contributes approximately **\$54.7 million** to the Miami County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output					
Sector	Total Employment	Total Output			
Animal, except poultry, slaughtering	75.7	\$54,689,977			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	737.3	\$28,384,027			
All other food manufacturing	63.9	\$22,616,927			
Oilseed farming	60.4	\$21,695,603			
Grain farming	93.9	\$11,725,363			
Farm machinery and equipment manufacturing	16.4	\$8,702,213			
Landscape and horticultural services	196.5	\$8,296,722			
Greenhouse, nursery, and floriculture production	63.0	\$7,483,415			
Wholesale trade	39.0	\$5,780,486			
Dairy cattle and milk production	20.2	\$5,521,445			

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Miami County economy.

All Agriculture, Food, and Food Processing Sectors					
Sector	Total Employment	Total Output			
Oilseed farming	60.4	\$21,695,602.78			
Grain farming	93.9	\$11,725,362.97			
Vegetable and melon farming	4.0	\$574,922.21			
Fruit farming	7.7	\$526,868.95			
Tree nut farming	3.5	\$308,495.97			
Greenhouse, nursery, and floriculture production	63.0	\$7,483,415.25			
All other crop farming	133.6	\$3,494,818.03			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	737.3	\$28,384,026.89			
Dairy cattle and milk production	20.2	\$5,521,444.58			
Poultry and egg production	3.5	\$1,628,964.02			
Animal production, except cattle and poultry and eggs	53.3	\$2,456,476.09			
Commercial logging	12.5	\$544,301.42			
Commercial hunting and trapping	25.5	\$517,421.22			
Canned fruits and vegetables manufacturing	10.8	\$5,395,140.55			
Animal, except poultry, slaughtering	75.7	\$54,689,976.71			
Bread and bakery product, except frozen, manufacturing	14.5	\$1,770,286.19			
Frozen cakes and other pastries manufacturing	0.9	\$142,223.66			
All other food manufacturing	63.9	\$22,616,927.44			
Wineries	5.6	\$1,795,187.97			
Farm machinery and equipment manufacturing	16.4	\$8,702,213.10			
Food product machinery manufacturing	4.8	\$1,482,339.27			
Veterinary services	54.5	\$5,468,761.23			
Landscape and horticultural services	196.5	\$8,296,721.69			

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Miami County, the retail sector was omitted.